

**UNITED STATES DEPARTMENT OF COMMERCE****United States Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/480,689 01/11/00 HEO

M 06192.0102

EXAMINER

022930 MM91/0829
HOWREY SIMON ARNOLD & WHITE LLP
BOX 34
1299 PENNSYLVANIA AVENUE NW
WASHINGTON DC 20004

RAO, S

ART UNIT

PAPER NUMBER

2814

DATE MAILED:

08/29/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/480,689

Applicant(s)

HEO ET AL.

Examiner

Steven H. Rao

Art Unit

2814

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____


Art Unit: 2814

Any inquiry concerning this communication should be directed to Steven H. Rao at telephone number 703-306-5945.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on 703- 306-2794. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703- 308-0956.

SR
8/23/07


OLIK CHAUDHURI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Response to Amendment

Applicant's election without traverse of claims 7-9 in Paper No. 5 is acknowledged.

Non-elected claims 1-6 have been withdrawn from consideration.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claim 7 recites in line 5 the word, "jobs". This is vague and indefinite as job can be interpreted to include a wide variety of undertakings. It is suggested that the word jobs be replaced with the words like steps or functions.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-8 to the extent understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonora et al. (U.S. Patent No. 5,570,990, herein after Bonora).

With respect to claim 7, Bonora describes a method of moving substrates in and out of a manufacturing process including an automatic and a manual transfer devices operated by instructions from the operator (Bonora Abstract lines 1-8) wherein the process apparatus includes a loader with a port (Bonora Abstract last line)a job table (Bonora fig. 16 # 420) including the steps of : transferring the cassette to the process apparatus through automatic or manual transfer device (figs. 7, 15) when the port is available (col. 11 lines 60-67) ; transmitting a start signal to automatic transfer device loader when the cassette is transferred to the process apparatus. (col. 11 lines 60-65) ; loading the cassette to the port from automatic transfer device (col. 5 lines 23-27) ; loading the cassette to the port according to the operator's instructions when the cassette is transferred.(fig. 7 box 212); determining whether cassette is detected on port (fig. 7 box 216) and determining a communication start signal (fig. 7 # 200) and setting the process apparatus in automatic transfer mode when the signal is detected (fig. 10; col. 8 lines30-35) and manual mode when there is no signal (figs. 4 and 10 col. 7 lines 11-14 and col. 8 lines 35-56 describe manual and automatic movement of the same parts and it will be inherent to provide a signal to switch from manual to automatic mode or vice versa).

With respect to claim 8, the step of loading the cassette to the port from the automatic transfer device including the steps of determining whether a communication

signal has been received (col. 7 lines 20-25) and requesting a cassette loading upon receipt of the signal (col. 3 lines 18-22).

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bonora as applied to claims 7-8 above, and further in view of Hwang et al. (U. S. Patent No. 6,238,160 B1, herein after Hwang).

Bonora as stated above describes a method of

With respect to claim 9, the method moving substrates in and out of a manufacturing process. Bonora does not specifically describe a chucking step.

However Hwang in its abstract lines 3-11 describes a chucking of the wafer or the like being electro statically chucked in a processing chamber as part of the wafer, etc. transporting operations to securely hold the wafer, etc. in a fixed position within the chamber.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Hwang's chucking step in Bonora's method to securely hold the wafer, etc. in a fixed position within the chamber. (Hwang col. 1 lines 17-18).

Chucking the cassette according to operator instruction's in the manual process mode (Hwang col. 2 lines 43-59, wherein the switches/ controller e.g. 30 can be manually controlled).

Reading the cassette ID by a ID reader on the loader (col. 12 lines 17-22).

Checking the position and number of the glass substrate in the cassette on the port (col. 12 lines 19-22).